## Northwest Atlanta Neighborhoods United

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October 25, 1990

Mr. James Dunbar Environmental Protection Division 3420 Norman Berry Drive, 7th Floor Hapeville, Georgia 30354

RE: Chambers of Georgia
Bolton Road Sanitary Landfill

Dear Mr. Dunbar:

Numerous and significant points of concern were expressed at the October 16th public hearing on the proposed landfill cited above. Some of the issues raised are as follows:

1) The geologic and hydrogeologic characteristics of the site are such that contamination prevention and adequate monitoring of contamination are impossible. The site lies within the Brevard Fault Zone. The fractured and jointed subsurface geology prevent the accurate determination of groundwater flow patterns and therefore prevent the accurate defining of upgradient and downgradient well locations.

You will note the disagreement in groundwater flow directions in the various geologic assessments performed at the site. R&D Testing felt that in the southern portion of the site that groundwater slopes generally to the southeast, while the Georgia Geologic Survey was of the opinion that it flows northeasterly. The Law Environmental Work Plan for Groundwater Monitoring System states that groundwater flow occuring in bedrock aquifers may be more anisotropic due to the complex geometry of joints, fractures and other secondary openings in the rock. The groundwater direction and depth is a matter of speculation, characterized by the use of terms such as,...groundwater flow is most likely towards the northeast...water flow direction is probably toward the Chattahoochee River.

As this site adjoins the unlined Southern States/Sanifill Landfill which is already releasing contaminants into the river, the absence of conclusive data on groundwater flow patterns and positive defining of upgradient and downgradient wells will result in the two



companies blaming each other for contamination and will prevent the State from holding either accountable. This, of course, may well result in our being left with two Superfund sites on the banks of the Chattahoochee River.

I refer you to the December 31, 1987 letter to you from William Hodges with Tribble and Richardson Engineers in which he states...due to its (the Chambers' site) peculiar geologic characteristics, a significant threat will be posed to the environmental integrity of the existing Southern States Landfill.

How do you define upgradient and downgradient in a fractured rock environment? Please give the reference (text) for making such determinations.

- 2) This site is a groundwater recharge area. While it does not appear on the new State recharge area map, the site meets the criteria for which these areas were chosen. We are prepared to challenge the accuracy of the map in court.
- 3) Noticeably absent from the information provided you by Chambers Development was the prior use of the site as a recreational lake. This lake was fed by surface and groundwater streams on the site.
- 4) Chambers' archaeological and historical investigations also failed to reveal that this site was part of the ancient Creek Indian village of Standing Peachtree, which was occupied by the Creeks from 8,000 BC until their removal in the 1830's. They also failed to discover or present the fact that this site was the point of a major crossing by the Union army during the Civil War. This is noted in most texts as the crossing of the Chattahoochee at the W&A Railroad bridge along the outer defense lines of Atlanta. The site has yielded an untold number of artifacts even until recent years. During the development of the adjoining Southern States landfill, rifles and other Civil War artifacts were unearthed and retrieved.

Chambers states that the site is surrounded by heavy industry. While several industrial facilities have been spot zoned and permitted along the river corridor, the site is surrounded by a densely populated residential area. Chambers failed to note the presence of an historic church, Collins Memorial United Methodist, located near the entrance to the site. No mention of the old family cemetery located at the entrance to the landfill site can be found in Chambers' documentation.

The previous mining and filling activities at the site further complicate the controlling of leachate. Removal of much of the natural soils with no soil replacement, filling with brick and other nubble on large portions of the site, along with other activites have further altered the natural geology of the site. The absence of homogeneous soils make the tracing of groundwater flow direction even more difficult. Heterogeneous soils do not provide the self cleaning process afforded by homogeneous soils.

- 6) The fractured rock environment also makes methane migration detection difficult if not impossible. Methane, like all gases, will follow the path of least resistence and that path will be the fractures. Gases are in fact used as detection mechanisms for fractures. As the fractures cannot be mapped, migration through them will go undected and could well result in off-site explosions.
- 7) The three acre out parcel which was not included in the City of Atlanta zoning approval appears to be included in the proposed plan. As referenced in the 1/24/90 letter to Brenda Head with Chambers from Cedric Maddox with the City of Atlanta Bureau of Sanitary Services... "No deviation from the original Special Use Permit will be allowed". If this parcel has received City of Atlanta zoning approval, I would like to know when and by whom such was given.
- 8) Included in the proposed fill areas are at least two areas of ponded water, described in the Atlanta Testing and Engineering report as swamps. There are also two streams traversing the site, along with spring seeps. Has Chambers been required to seek a Section 404 permit from the EPA? If not, please explain why you feel such was not required.
- 9) Blasting has been called for in all engineering reports I've seen. However, you stated at the October 16th hearing that no blasting would occur at the site. Please confirm that fact and advise how the rock will be removed otherwise.
- 10) Why was Chambers not found to be developing a landfill without a permit when they installed the groundwater monitoring wells on the site in December of 1989 after receiving a denial of their request to do so by you on November 27, 1989?
- 11) Liners are recognized by no one as being leak proof. In fact, an EPA funded study on their effectiveness performed by Geoservices, Inc. reveals that under ideal conditions, one hole per acre can be expected. They estimate that composite liners will allow between .02 and 1.0 gallons per acre per day. Our past experience with solid waste disposal sites proves that ideal circumstances are the exception, certainly not the rule.

Phillips Petroleum shows in their disclaimer for HDPE liners that many chemicals, both industrial and household, will degrade and/or permeate their highest quality liners.

12) This then leaves the leachate collection system responsible for the safe collection of contaminants. These underground pipes will be under constant attack by the corrosive chemicals they collect. Further, siltation will cause clogging as will micro-organisms growing in the pipes. Because of their placement beneath the landfill, the site would have to be excavated to make any repairs. Anyone having basic plumbing at home, which receives primarily water, knows that replacement of failed pipes will be required at some point.

So, what we see is a site which is totally unsuited for solid waste disposal with perhaps every possible avenue for contamination of the

surrounding environment present, relying on the use of engineering techniques which are proven failures to overcome the problems inherent with the site. This is not acceptable.

The revised Solid Waste Management Act not only empowers you to deny a permit which will result in environmental degradation or threaten the health and safety of Georgia's citizens, but requires you to do so. I refer you to Section 12-8-24(d).

Also, as the site threatens the quality of the water in the Chattahoochee River, a natural resource shared by the states of Alabama and Florida, Section 12-8-21(e) provides you with added incentive for caution.

I would also refer you to Section 12-8-25.2 and Section 12-8-27(1)(A) and Section 12-8-27(2) for review.

We are depending on your thoughtful consideration in making this decision. I will gladly supply you with documents to support the above comments if you so desire.

Sincerely

Elena Fash